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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,629	09/19/2003	James N. Conway JR.	81230.95US1	5082
34018 7590 01/29/2010 GREENBERG TRAURIG, LLP 77 WEST WACKER DRIVE SUITE 3100 CHICAGO, IL 60601-1732				
EXAMINER WONG, ALBERT KANG				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/664,629

**Applicant(s)**

CONWAY ET AL.

**Examiner**

ALBERT K. WONG

**Art Unit**

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 6, 9, 10, 12-15, 17, 18, 21, 23-26 and 28-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 9, 10, 12-15, 17, 18, 21, 23-26 and 28-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-846)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

1. This Office action is in response to the amendment filed November 13, 2009. Claims 1-4, 6, 9-10, 12-15, 17-18, 21, 23-26, and 28-44 are pending. The rejection to claim 21 has been withdrawn. The rejections to the amended claims have been withdrawn and new rejections are presented in response to the added limitations.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-4, 6, 9-10, 12-15, 17-18, 21, 23-26, 28-30, and 34-37 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: a means for causing function keys to be associated with one of a plurality of colors. The mere recitation of programming, which is viewed as software, is not sufficient to perform the claimed functionality.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-4, 9-10, 14, 17-18, 23-26, 28, 30, 31, 33, 38-40, and 42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duncan et al (6,549,133) in view of Duarte (6,608,271).

Regarding claim 1, the claimed function key is shown as items 4-6. Duncan teaches in col. 5, lines 40-45 that the keys are color coded to the device being controlled. The dog collars are considered appliances. Alternatively, if one does not consider a remote controlled dog collar

an appliance, it would have been obvious to use color coding to allow the user to easily identify the item being controlled with the corresponding button on the remote controller. Duncan does not teach programming for causing the function key to be associated with one of a plurality of colors. Duncan does not teach programming for causing the function key to be associated with one of a plurality of colors as a function of one of a plurality of appliances controlled. Duarte teaches a keyboard, which may be used in a remote control, wherein each key is assigned a plurality of different functions. The functions may be selected by selecting the mode of the device. When a particular function is selected, a corresponding illumination of the key is made. Such illumination may be color based. Inherent in such a device is the programming for performing the disclosed function of illumination control. It would have been obvious to use the programming for switching among the various functions with corresponding control of the color of the keys to allow easy switching between the function with easy identification by the user as taught in Duarte.

Regarding claim 3, Duncan does not teach that the key is illuminated in a color. Duarte teaches a remote control where the keys may be illuminated in various colors. It would have been obvious to combine the teachings since they pertain to the same field (remote controls). One of ordinary skill in the art would recognize that illumination is another way to imparting color to a key.

Regarding claim 4, see col. 3, lines 50-55.

Regarding claim 9, it would have been obvious to one of ordinary skill in the art use any conventional form of illumination. EL displays is a conventional display means with color.

Regarding claim 10, the selected color for the keys must have been determined at some point based on some criteria. It would have been obvious to allow the user to select the color to enable him to customize the device.

Regarding claim 14, this is the method equivalent to claim 1. Since the device has been shown to be anticipated or obvious, the method of making the device is similarly anticipated or made obvious.

Regarding claims 17-18, these claims are the method equivalent of claims 3-4 and are similarly made obvious.

Regarding claim 23, see rejection of claim 10 above.

Regarding claim 24, the color of the keys in Duncan is predefined.

Regarding claim 26, in lighted keyboards, the user is typically able to control the illumination. It would have been obvious to provide this function to any illuminated keyboard. The illumination would function to display the color of the key.

Regarding claim 28, this is a broader version of claim 1 since color is considered a visual cue. Thus, it is similarly rejected.

Regarding claim 30, Duncan teaches color as a visual cue.

Regarding claims 31 and 33, these are the method equivalents of claims 28 and 30 and are similarly rejected.

Regarding claim 38, Duncan teaches the step of associating appliances with color cues. Each collar is associated with a particular color. When the proper jumper is selected, the colored key is associated with the cue corresponding to the color of the collar controlled. There must be some means for the user to associate the jumper with the color cue. This may be in the form of

an instruction manual. The manual is considered the step of presenting. Alternatively, Duarte teaches a system wherein the device is programmed such that the color of the key is associated with the function to be performed. This may be related to device controlled since it would have been obvious to use similar colors for the same device for ease of use. For the programmer to associate the color with the appliance, there must be some presentation at some time to allow him to make a selection among the various color options. This may be in the form of an instruction sheet or even a presentation to the user of a variety of colors available for his selection in the form of sample illumination.

Regarding claim 39, it is conventional for programmable remote controls to receive signals from the receiver so that the transmitter and receiver are able to communicate. It would have been obvious to use conventional methods to achieve their known functionality.

Regarding claim 40, it would have been obvious to automate the process to avoid human intervention.

Regarding claim 42, Duncan teaches the use of color as a cue.

Regarding claim 43, the color on the buttons and on the collar is predetermined at the time of manufacture.

Regarding claim 44, it would have been obvious to apply a color designation on the collar to provide an association between the cue and the appliance.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2, 12-13, 15, 25, 27, 29, 32, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duncan et al (6,549,133) and Duarte (6,608,271) as applied to claim 1 and further in view of Weber (6,803,874).

Regarding claim 2, Duncan does not teach a mode key to place the controlling device into various modes and having a color associated with one of the appliances. Weber teaches a remote control device with mode keys (shown generally around label 1). Although Weber does not disclose that the mode key has the same color assigned to the appliance, it would have been obvious to associate the same color with the item controlled so that the user can easily associate the button with the item controlled as suggested by Duncan.

Regarding claim 12, where a key is dedicated to a single appliance, it would be lockable to that appliance regardless of the mode of the remote control.

Regarding claim 13, the remote control accepts commands that allow the remote control to send particular signals to control particular devices. This is accomplished when the device is programmed.

Regarding claim 15, this is the method equivalent to claim 2. Since the device has been shown to be obvious, the method of making the device is similarly made obvious.

Regarding claims 25 and 27, see rejections of claims 12 and 13 respectively, above.

Regarding claim 29, see rejection of claim 2. Color is a visual cue.

Regarding claim 32, this is the method equivalent of claim 29 and is similarly rejected.

Regarding claim 41, this limitation has been addressed in prior claims.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Duncan and Duarte as applied to claim 1 above, and further in view of Ivancic (6,798,359).

Regarding claim 6, Duncan does not teach a displayed soft key. Ivancic teaches a remote control with a displayed soft key. It would have been obvious to combine the references since they are in the same field of endeavor and to gain the advantages as shown by the references.

#### **Response to Remarks**

9. Applicant argues that Duncan fails to teach, suggest or make obvious the causing of the color of the switched to be changed as a function of the targets. Duncan teaches the association of key color with the appliance to be remotely controlled. However, the device in Duncan does not have illuminated keys. Therefore the color is not changed via programming or user selection. Duarte teaches a keyboard that may be used in a remote control device. Numerous functions are associated with each key via glyphs. The user can selectively control the illumination of the keys and effectively change the color of the keys to highlight the particular function the key is to perform when in the current mode. Thus, by selecting a particular function, the key both generates a code associated with the function and the color of the key is changed to inform the use of the particular function associated with the key. It would have been obvious to combine these teaching since they pertain to remote controls that have keys that perform different control purposes and use color to indicate the control functions. Further, Duarte solves the problem of function identification via a system that automatically changes the color of the key in response to a change in function associated with the key.

Applicant also argues that Duncan does not teach the presenting of cues that are associated with a plurality of appliances to receive input. The Examiner disagrees. The presentation may be in the form of an information sheet that shows which jumper to select for the corresponding appliance and the corresponding color. There is nothing in the claim to limit



the presentation to some means associated with the remote control device. Finally, even if one were to interpret that claim in view of amended claim 1 as having programming to change the color of the keys, it would have been obvious to present and associate the cues to achieve the end result of having illuminated color keys be related to the device being controlled.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALBERT K. WONG whose telephone number is (571)272-3057. The examiner can normally be reached on M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian A. Zimmerman can be reached on 571-272-3059. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Albert K Wong/  
Primary Examiner, Art Unit 2612

January 18, 2010